

AUDIO

FAQ

Q I've heard that a recent copyright ruling may force some internet radio stations to close. Is this true?

A The US Copyright Office's Copyright Royalty Board recently upheld an earlier ruling, which increases the royalties payable by American-based internet radio stations. It implemented higher payment levels from 15th May, and allows for an increase in fees each year until 2010. Charges will be backdated to 1st January 2006.

Campaign group www.savenetradio.org claims that the ruling will more than triple copyright rates, putting many broadcasters out of business. However, the American Federation of Television and Radio Artists has applauded the decision.

Although it's hard to know how great an effect this will have, it's likely that many broadcasters will be forced to change their business model, possibly by introducing adverts or reducing the number of stations hosted. Fortunately, stations based elsewhere aren't affected, but it's possible that the US ruling will prompt a rethink from other national copyright authorities.

Ben Pitt

Music and photography expert

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IRIVER X20

★★★★

£149 inc VAT

iRiver seems to be fond of packing features into its MP3 players, but it has really pushed the boat out with the X20. Its 2.2in screen is unusually large for a flash memory-based player, and can be used to display videos as well as photos and album artwork. There's an FM radio, a MicroSD slot for expanding the memory capacity, a recorder function via the built-in microphone or line input and even integrated stereo speakers. The quality of the latter is extremely basic, but they're still welcome for video or voice-recorder playback.

The lithium-ion battery is replaceable, which could prove useful when the supplied cell starts to lose its capacity. Charging is via USB only, but the USB port is a standard Type B Mini-USB so finding a replacement cable will be easy if the one supplied is lost or broken.

The downside of all these features, and particularly the large screen, is that the player is fairly big compared to most flash memory-based players. Measuring 96x48x16mm, it looks more like a hard disk-based player, although at 71g it's still reasonably light.

iRiver is one of very few companies that designs interfaces that can compete with Apple's iPod range, but the X20's controls are disappointing. The navigation pad is surrounded by a wheel for adjusting the volume and scrolling through menus, but its low profile meant that we found it difficult to make accurate adjustments. The menu layout is



fairly standard but some features could be improved.

MPEG4 and WMV video files are supported, but only up to 512Kbit/s, 320x240 pixels and various other limitations. This meant that videos transferred using Windows Media Player or Explorer often wouldn't play, but the bundled iRiver Plus 3 software converted a wide variety of file types automatically. However, it didn't understand the concept of PAL widescreen MPEG2 footage and squashed it to fit the screen.

Otherwise, however, videos and photos looked great on the bright screen. The sound quality of

the player was generally up to scratch, too, but boosting frequencies with the EQ controls caused distortion, regardless of listening volume. The headphones were distinctly poor, so we recommend budgeting at least a further £10 for a superior pair.

The X20 has much going for it, but too many drawbacks, particularly regarding its control wheel and sound quality. If video playback is as important to you as music, though, the great screen makes it a good choice.

Ben Pitt

SUMMARY

- ✓ Feature-packed
- ✗ Poor-quality headphones
- ✗ Awkward control wheel

MP3 PLAYER 8GB capacity (2GB (£79) and 4GB (£99) versions also available), supports MP3, WMA, WMA-DRM, ASF and OGG audio, JPEG image, WMV and MPEG4 video (with limitations), USB Hi-Speed interface
PART CODE REI-X20(B)
SUPPLIER www.advancedmp3players.co.uk
DETAILS www.iriver.eu.com

PERFORMANCE (see page 58)



Also consider...

PHILIPS SLA5520

★★★★★

£80 inc VAT

PRICE CUT!

Philips' SLA5520 takes music from your PC via a wireless network and plays it on your hi-fi. It comes with Philips' own server program, but you can also use it with Windows Media Connect.

The SLA5520 is quite a basic device, but it's a great buy if you want an easy way to play your music wirelessly.

WIRELESS NETWORK MUSIC PLAYER
Supports MP3, Wav, WMA, WMA-DRM, 802.11g interface, WEP or WPA encryption, 3.5mm socket audio output. Requires Windows 2000/XP
SUPPLIER www.broadbandstuff.co.uk
DETAILS www.philips.com
✓ Good value ✗ Screen hard to read
FULL REVIEW Jul 2006



LOGITECH X-230

★★★★★

£27 inc VAT

The X-230s sound clearer, richer and more balanced than any other set under £50 and quite a few that are more expensive than that. If you're looking for a good set for music or games, there are no better speakers available at this price.



STEREO SPEAKERS 2.1, 32W power, 3.5mm stereo cable inputs
PART CODE 970123-1120
SUPPLIER www.amazon.co.uk
DETAILS www.logitech.com
✓ Excellent sound quality ✗ Cabling is awkward
FULL REVIEW Jun 2007

LOGITECH Z-5450

★★★★★

£202 inc VAT

Logitech's Z-5450 5.1 surround-sound speakers transmit sounds to the rear set wirelessly, so you'll have less clutter in your living room. Sound quality is excellent and the speakers are loud.

With loads of inputs and a decoder, these speakers are perfect for your PC or DVD player.



5.1 SPEAKERS Three line inputs, one coaxial and two optical digital inputs, 315W RMS power
PART CODE 970191-0120
SUPPLIER www.morecomputers.co.uk
DETAILS www.logitech.co.uk ✓ Sound great; loads of features ✗ Expensive
FULL REVIEW Dec 2006

AUDIO TECHNICA

QuietPoint ATH-ANC7

★★★★★
£100 inc VAT



If you appreciate high-quality sounds but can't justify spending £100 on headphones, stop reading now. Audio Technica's QuietPoint ATH-ANC7 is the best-sounding set we've heard, and includes active noise cancelling to reduce background noise. The closed-back design forms a seal around the ears to reduce noise still further and is very comfortable, although our ears got a bit hot in warm weather. The battery and electronics are incorporated into the left earphone and the detachable cable is easy to replace.

Compared to Grado Labs' SR60, which cost £72 and won a Best Buy award in our March 2007 Labs test, bass was deeper and more focused, while the two were pretty similar at mid and high frequencies. However, Audio Technica's set match the clarity of open-backed headphones in a closed-backed design and include active noise cancelling, so they're worth every penny.

Ben Pitt

SUMMARY

- ✓ Fantastic sound quality
- ✓ Effectively reduces external noise
- ✗ Makes your ears a bit hot

NOISE-CANCELLING HEADPHONES

3½mm stereo jack plug plus ¼in and airline adaptors, 1.6m cable, weighs 200g, requires one AAA battery
PART CODE ATH-ANC7
SUPPLIER www.nusystems.co.uk
DETAILS www.athheadphones.com

M-AUDIO

JamLab

★★★★★
£42 inc VAT



JamLab is a simple USB audio interface aimed at guitarists who want to use their PC for recording and as a makeshift guitar amplifier. An instrument input and headphone output are the only connections, and a hardware volume control is sadly absent. The control panel utility lets you adjust the recording levels, although you can also use Windows' mixer utility.

Sound quality was up to scratch, and the guitar-effects software produced some suitably raunchy distorted guitar sounds. Its effects-pedal appearance is fun but could be easier to use. It uses distortion and EQ effects in place of proper guitar amp simulation and, as a result, cleaner guitar sounds were weedy. The supplied drum loops can be chained together to play along to and the guitar effects work as a VST plug-in for use in recording software.

There's not much to it, but JamLab serves a useful purpose at a reasonable price.

Ben Pitt

SUMMARY

- ✓ Simple and affordable
- ✓ Good sound
- ✗ Not so good for clean guitar sounds

USB AUDIO INTERFACE ¼in jack guitar input, mini-jack headphone output, 24-bit 44.1/48kHz sample rate, USB interface
SUPPLIER www.turnkey.co.uk
DETAILS www.maudio.co.uk

CHOOSING A... Speaker System

Follow the steps to find your ideal specs

SURROUND FORMAT: Stereo

RMS POWER: 5W

INPUTS: 1x analogue

BUILT-IN DECODING: None

Recommended minimum in grey

1 PC speaker systems, which consist of speakers and an amplifier to power them, can cost anything from £5 to £300. The cheapest sets, with the specifications shown in grey above, will be fine for those who simply want to play Windows alert noises on a PC they use solely for work.

2 Those who use their PC for any kind of entertainment should go for a better system. The first thing to look for is a subwoofer, which handles bass frequencies, while the satellites output mid- and high-frequency sounds.

Other than this, the best way to establish the quality of a system is to consult our reviews. Specifications don't tell you much and the price of a system often bears little relation to its actual performance.

3 Games and DVDs will benefit greatly from a surround-sound system. The standard surround configuration is 5.1, which consists of five satellite speakers and one subwoofer, but those who must have the latest technologies should consider 6.1 or 7.1 speakers, plus a compatible sound card that is capable of supporting the extended Dolby Digital EX format.

4 The power rating can give you a rough idea of how loud the speakers will go. Ignore PMPO or Peak Power ratings, which can be as much as 40 times the RMS figure.

A 50W RMS system should provide ample volume for a desktop PC, but for a home cinema look for 100W RMS or more.

5 Stereo speakers just need a single analogue stereo input, while a 5.1 system needs three. Surround-sound systems incorporating Dolby Digital decoders must be fed through an S/PDIF digital input, which comes in (non-compatible) coaxial and optical versions. However, as Dolby Digital decoding can be handled in software, surround speakers with analogue inputs are far more cost-effective.

LOGITECH

AudioStation

★★★★★
£128 inc VAT



Logitech's AudioStation is a mid-range iPod speaker dock, but it costs better than many that cost more. It's the only dock we've tested with an FM tuner, a sensible addition given no iPod has its own. You can't synchronise a docked iPod with your PC, but the AudioStation is great value, and the first iPod dock to deserve our Best Buy award.



IPOD DOCK STEREO SPEAKERS iPod dock connector and 3½mm stereo line input, composite/S-video outputs, FM radio, 80W RMS power PART CODE 97 0217-0120 SUPPLIER www.morecomputers.com DETAILS www.logitech.co.uk ✓ Clear, loud sound ✗ No iPod PC connector FULL REVIEW Jan 2007

SANDISK

Sansa e270

★★★★★
£94 inc VAT



Sandisk's Sansa e270 has 6GB of storage, but it costs about the same as Apple's 4GB iPod Nano. Unlike the Nano, it can play back video files on its colour screen; its software makes it easy to convert and transfer them. It isn't as easy to use as an iPod, but its good battery and sound make it a great choice.

FLASH MP3 PLAYER 6GB capacity, supports MP3, WMA and WMA-DRM music, JPEG/bitmap picture files and proprietary video files, USB Hi-Speed interface PART CODE SDMX4-6144 SUPPLIER www.misco.co.uk DETAILS www.sandisk.co.uk ✓ Lots of space; good sound ✗ Nano has better controls FULL REVIEW Feb 2007

Battery life -50% Reference +50% +100%

APPLE

iPod Shuffle

★★★★★
£50 inc VAT



Apple's tiny iPod Shuffle is affordable and beautifully designed. It's light, with an integrated metal clip that grips clothing securely. The controls are basic: there is just track skip. Battery life and sound are both good, though, so it's a great player if you can live without a screen and don't mind using iTunes.

FLASH MP3 PLAYER 1GB capacity, supports MP3, AAC, protected AAC, Wav, AIFF, audible and Apple lossless music, USB Hi-Speed interface PART CODE MA564ZT/A SUPPLIER www.dabs.com DETAILS www.apple.com/uk ✓ Tiny; great design ✗ No display FULL REVIEW Feb 2007

Battery life -50% Reference +50% +100%